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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,093	08/21/2001	Sjoerd Stallinga	PHN 17,843	9205

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

BATTAGLIA, MICHAEL V

ART UNIT PAPER NUMBER

2652

DATE MAILED: 12/31/2003

*5*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/914,093

Applicant(s)

STALLINGA ET AL.

Examiner

Michael V Battaglia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 1 of claim 2, it is unclear whether "the electrode layer" is referring to the first electrode layer or the second electrode layer.

Claim 5 recites the limitation "the transparent layer" in line 3. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Wada et al (hereafter Wada) (US 6,480,454).

In regard to claim 1, Wada discloses an optical wavefront modifier for modifying a wavefront of an optical beam passing through the modifier, the modifier comprising a first (Figs. 1-3, element 13) and a second transparent electrode layer (Figs. 1-2, element 14) and a medium for modifying the wavefront in dependence on electrical excitation of the medium and arranged between the electrode layers (Fig. 2, element 17), the first electrode layer comprising three or more electrodes of a transparent, conductive material (Fig. 3, elements A-E), characterized in that the first electrode layer comprises a series arrangement of resistors (Figs. 3 and 4, elements r1-r4), the electrodes being electrically connected to the series arrangement of resistors (Fig. 3), and the resistors being made of said transparent, conductive material (Col. 9, lines 62-67).

In regard to claim 2, Wada discloses that the electrode layer comprises three terminals, which are electrically connected to the series arrangement of resistors (Fig. 3, elements A-C).

In regard to claim 4, Wada discloses that the series arrangement of resistors is integrated in the electrodes (Figs. 3 and 4).

In regard to claim 5, Wada discloses a device for scanning an optical record carrier having an information layer (Fig. 18, element 189), comprising a radiation source for

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generating a radiation beam (Fig. 18, element 181), an objective system for converging the radiation beam through the transparent layer to a focus on the information layer (Fig. 18, element 185), and a detection system for intercepting radiation from the record carrier (Fig. 18, element 189), characterized in that an optical wavefront modifier according to Claim 1 is arranged in the optical path between a radiation source and the detection system (Fig. 18, element 184).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsato (EP 0 745 980 A1) in view of Wada.

In regard to claim 1, Ohsato discloses an optical wavefront modifier for modifying a wavefront of an optical beam passing through the modifier (Figs. 8 and 10, element 120), the modifier comprising a first (Fig. 10, elements 120B1-120B3) and a second transparent electrode layer (Fig. 10, element 120B) and a medium for modifying the wavefront in dependence on electrical excitation of the medium and arranged between the electrode layers (Fig. 10, element 120A), the first electrode layer comprising three or more electrodes of a transparent, conductive material (Fig. 10, elements 120B1-120B3). Ohsato does not disclose that the first electrode layer comprises a series arrangement of resistors, the electrodes being electrically connected to the series arrangement of resistors and the

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resistors being made of said transparent, conductive material. However, Ohsato does disclose modifying the optical wavefront by maintaining the central electrode (Fig. 10, element 120B2) at a predetermined reference voltage and raise or lower the voltages applied to the left and right electrodes (Fig. 10, 120B1 and 120B3) according to an amount of tilt so that the voltages applied to the left and right electrodes are centered about the central electrode (Page 6, line 55-Page 7, line 1 and Page 7, lines 20-23). The examiner notes that the inner workings of the correcting voltage generating circuit are not disclosed but that the electrode voltage driving requirements could easily and simply be met by electrically connecting the electrodes to a series arrangement of resistors where the resistor between the left and central electrodes and the resistor between the central and right electrodes are of equal resistance.

Wada disclose a first electrode layer comprising a series arrangement of resistors, wherein the electrodes are electrically connected to the series arrangement of resistors and the resistors being made of said transparent, conductive material (Col. 9, lines 62-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to maintain the central electrode at a predetermined reference voltage and to raise or lower the voltages applied to the left and right electrodes according to an amount of tilt so that the voltages applied to the left and right electrodes are centered about the central electrode in the circuit of Ohsato using the series arrangement of resistors, wherein the electrodes are electrically connected to the series arrangement of resistors and the resistors being made of said transparent, conductive material of Wada, the motivation being to realize electrode voltage driving requirements of Ohsata in a simple and easy way.

In regard to claim 2, Ohsato discloses that the electrode layer comprises three terminals (Fig. 10, elements 120B1-120B3), which are electrically connected to the series arrangement of resistors (Fig. 10).

In regard to claim 3, Ohsato discloses that the electrodes have a configuration for imparting a wavefront modification in Seidel form (Fig. 10).

In regard to claim 5, Ohsato discloses a device for scanning an optical record carrier (Fig. 8, element 102) having an information layer (Fig. 8, element 106), comprising a radiation source for generating a radiation beam (Fig. 8, element 110), an objective system for converging the radiation beam through the transparent layer to a focus on the information layer (Fig. 8, element 114), and a detection system for intercepting radiation from the record carrier (Fig. 8, elements 24, 26, and 118), characterized in that an optical wavefront modifier according to Claim 1 is arranged in the optical path between a radiation source and the detection system (Fig. 8, element 120).

#### *Citation of Relevant Prior Art*

6. Ootaki et al (US 6,078,554) discloses a wavefront aberration corrector comprising an electrode layer having three terminals in Seidel form (Fig. 14). Ogasawara (US 6,125,088) discloses a wavefront aberration corrector with an electrode layer having a plurality of terminals disposed in Seidel form (Fig. 4A). Furukawa et al (US 6,411,576) discloses a wavefront aberration corrector with an electrode layer having a plurality of terminals (Fig. 4B).

#### *Conclusion*

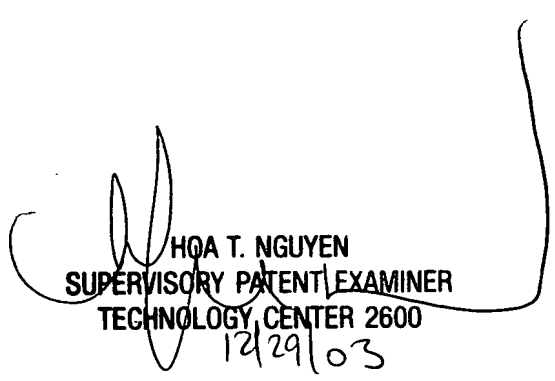
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Battaglia whose telephone number is (703) 305-4534. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

  
Michael Battaglia

  
HOA T. NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600  
12/29/03